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# Anthropology as a Following Science

## Humanity and Sociality in Continuous Variation

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### Introduction

The vantage point of this paper will be to view anthropology through the lens provided by G. Deleuze and F. Guattari's notion of *following sciences* (1987: 372–3). Contrasting following sciences with what they called the *reproductive sciences*, Deleuze and Guattari defined the former as concerned with *singularities* and *continuous variation* rather than law-like regularities. Characteristically, these authors do not refer to social sciences in their discussion of these two models, and their definition remains extremely abstract. However, the suggestion that following sciences are *itinerant* and *ambulant*, concerned with “following a flow in a vectorial field across which singularities are scattered like so many ‘accidents’ (problems)” (372) can be seen as a description of the ethnographer's predicament. Indeed, it is noteworthy that from the point of view of the science and technology studies (STS) and the anthropology of science and technology, the designation ‘following science’ connects almost literally with the Latourian dictum of ‘following actors’ (Latour 1987). In this light STS might be characterized as the *following science dedicated to following science* (and technology). Designating anthropology broadly as a following science has the additional appeal of tying in with disciplinary interests in elucidating indigenous concepts, structures, world-views, and cosmologies from within rather than classifying and evaluating them from without.

If one takes literally the Deleuzian notion of following sciences, it may seem as if STS and social anthropology already, or perhaps automatically, qualifies. As *following* rather than *reproducing* sciences STS and the newer philosophies of science can be characterized as having taken a 'practice-turn' (Schatzki *et al* 2001). This was vigorously outlined in A. Pickering's landmark edition *Science as Practice and Culture* (1992). Proponents of the practice-turn argued that philosophers of science and technology had failed to adequately describe science and technology because they were too focused on delineating scientific method and defining science conceptually, rather than on following science in order to explore how scientists actually work. In numerous contributions, STS researchers have shown that actual scientists were by no means solely preoccupied with theory, concepts, or, indeed, truth (cf. Biagioli 1999). Rather they spent their time gathering resources, laboriously tinkering with laboratory set-ups, enrolling evermore natural and technical entities, carefully working on the rhetoric of their articles, and viciously fighting with other colleagues.

Devoting their efforts to the naturalistic study of all that scientists *did*, the early laboratory studies approached science with a basically *etic* stance (e.g. Latour & Woolgar 1979). Scientific systems, networks and so forth were described from the outside. This characterization may seem peculiar since one of the traits distinguishing laboratory studies from the philosophy of science was precisely that it moved inside laboratories, rather than defining epistemological principles in the abstract. Yet, even as B. Latour and S. Woolgar entered the laboratory, they did not do so in order to elucidate the self-understandings and motivations of the scientists working there. On the contrary, they deliberately remained 'strangers'. The result was that they could re-describe what scientists viewed as a search for facts and truth as a practical matter of producing inscriptions. As we know, one consequence of applying this outsider's perspective on scientific activity was to anger a good many scientists, as became vivid in some of the *science wars* exchanges (Smith 1997).

However, within the field of STS the outsider's stance also gradually caused trouble. A critical question often raised by anthropologists was whether naturalistic description of scientific activities had certain built-in limitations. By declining to query the quality of scientific concepts *as concepts*, STS scholars were prevented from coming to grips with the question of what makes science meaningful, important, lively, and exciting *to scientists* (Stengers 2011)<sup>1</sup>. Indeed, inattentiveness

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<sup>1</sup> Much of the following argument is inspired by arguments that unfolded during the "Comparative Relativism" symposium, published subsequently as a special issue of *Common Knowledge* 17(1). The quotations are from the original papers and do not completely match the published versions, however, references are made to the

to this issue could be viewed as preventing STS researchers from elucidating the many varied ontologies of science and also impeding their ability to understand the politics of science that was built into their concepts (Bowker 2010).

This critical observation about the limitations of laboratory studies did not involve a rejection of the ‘practice-turn’; it should certainly not be seen as a demand to return to previous modes of epistemological clarification. Rather, it suggested that when one delves deeper into practice it becomes impossible to stay clear of the ways in which *any practical activity is conceptually enmeshed*.

Here, as well, a connection can be made with the previously mentioned notion of following sciences. For Deleuze and Guattari, too, ‘following’ must mean something rather different than simply ‘walking after’, observing all there is to see, describing what is really going on. For, if following is an entailment of being able to learn something from what one studies, its requirements are by no means simple. Indeed, it always raises specific questions regarding ‘how to follow creatively’ in order to be able to discern singular problems raised by practices rather than describe what is generic about them. This requirement also entails that questions relating to the connection between the ‘conceptual’ and the ‘empirical’ are opened up anew.

This in a double sense: for, in the first instance, there is the question of the characteristics and operations of the concepts used by the actors followed. Then, subsequently, there is the issue of the concepts used by the anthropologist or STS scholar to make sense of the specific practical-conceptual constellation that comprises their matter of concern. In the present context, this matter of concern can be broadly characterized as having to do with the sorts of humanity and sociality embodied in those practices, and how our ways of studying are able to articulate them.

The question of how to relate the conceptual and the empirical has also been long-standing one in anthropology proper. While it is impossible to go into details, it can be suggested that a key moment occurred with M. Strathern’s (1988) *The Gender of the Gift*, which argued simultaneously against defining Melanesian concerns *in terms of* Western typologies (e.g., of gender and commodification) *and* against simply *replacing* those typologies with indigenous categorizations. Widely different interpretations have been offered as to the implications of this double requirement; just as multiple fascinating studies have followed in its wake (e.g. Holbraad 2008; Maurer 2005; Zhan 2009).

Viewing anthropology as a following science that uses ethnography as a creative method (or technology) for following offers some particular benefits. In

our case it allows, first of all, for the suspension of common-sense ideas of what the human and the social *consists of*. The benefit of this suspension is that it enables the researcher to follow creatively, and facilitates him or her to learn from the diverse actors followed, the specific shape *they give* to what we normally designate as human and social.

Here we are firmly back on the territory of both STS and anthropology. Of particular interest for the present occasion is the work of A. Mol. Her analytical aspiration, not least inspired by actor-network theory (ANT) (Law & Hassard 1999; Law & Mol 2002), very much follows this line of thinking: she has named the endeavor empirical philosophy.

Now of course if one is interested in learning from actors how they deal with what we usually call the human and the social, this includes the possibility that *nothing* resembling either the human or the social, as generically understood, is dealt with. In these cases, the intriguing question of what different actors take the world to be composed of *if not* humans and society is opened. This analytical agenda has been sharpened by social anthropologists M. Strathern (1988) and R. Wagner (1975). For the present purposes I pinpoint it with E. Viveiros de Castro's term "multinaturalism" (2005).

The choice of exemplars invoked here is not accidental. The scholars referred to above have all played central roles in redefining not only conceptual concerns in their fields, but also the relation between the conceptual and the empirical more generally. In doing so, they have opened up new ways of coming to terms with the variability of humanity and sociality. But in spite of important resonances, empirical philosophy (and its kin ANT) and the social anthropological studies that I classify here under the general heading *multinatural anthropology* have not done so in identical ways. Teasing out some of central differences is the main ambition of this paper.

Below, a series of 'variations' engage with the question of how empirical philosophy and multinatural philosophy engage with issues such as methods, actors, scales, practices, concepts, and ontologies. These variations aim to highlight that despite of their affinities, these approaches have different analytical and empirical focal points. Making use of different conceptual–empirical constellations, the approaches make available alternative routes that may be taken in order to understand 'the human', 'the social', and their interconnections. By adopting a strategy of continuous variations, I thus aim to maximize the ability of ANT and empirical philosophy to exhibit its contrasts with multinatural anthropology, and *vice versa*.

This has implications for how I proceed. Most importantly, it means that I attend to a particular set of programmatic arguments from empirical philosophy that

precisely highlights its distinctiveness from anthropology. Likewise, I focus on analytical suggestions from multinatural anthropology that put it most starkly at odds with STS scholarship. Although it would certainly be possible (and sensible) to offer readings that concentrate on resonances and similarities, the present aim is to use these differences and contrasts methodically, to diagnostic effect.

With this in mind, the rest of the paper aims to engage in its own exercise of ‘continuous variation’ by teasing out distinctions and relations between empirical philosophy and multinatural anthropology. The variations take their starting point in the classical dichotomy between emic insider studies, and etic outsider studies. As a first estimation, multinatural anthropology could be seen to exemplify the emic, ANT and empirical philosophy the etic. What the first variation suggests, however, is that the emic–etic distinction is never clearcut, is always ambiguous and blurred. It is, in fact, in part due to this realization that modes of symmetrical inquiry and exposition have been developed in both STS and anthropology. The following variations explore in more detail the varied symmetrical solutions provided by empirical philosophy and multinatural anthropology. There are of consequences for how anthropologists bring humanity, sociality, or their *alters* into view, and for what follows, analytically and practically.

### **First Variation: Emic, Etic, Symmetric**

According to a classic linguistic formulation (Pike 1967), the terms *etic* and *emic* distinguish modes of accounting for, describing, explaining, and interpreting events and occurrences. In the hands of anthropologists the distinction came to refer to the difference between insider (emic) and outsider (etic) descriptions of culture. Anthropologists, of course, were outsiders, but many came to define their task as elucidating insider conceptions. In the two cultures optic proposed by C. P. Snow (1993), this aligned with a more broadly humanistic perspective and contrasted with an impartial approach said to characterize the natural sciences.

Thus differentiated, emic approaches, often including social anthropology, take a *participant’s perspective* in order to study purposive meaningful action and to gain critical insight (Smith 2005: 110). Etic approaches, in contradistinction, are said to take an *observer’s perspective*, in which intention and meaning is less central, or not central at all (after all, natural phenomena, one is told in methods courses, do not interpret). If the aim of emic approaches is to interpret and understand, the aim of etic approaches is to reduce, quantify and model. This dualist depiction is well known. It might perhaps be easy to agree that anthropology—at least cultural and social—belongs to the side of the emic. Yet, the relation between the emic and the etic often blurs, as the following story illustrates.

In her recent book *Natural Reflections* (Smith 2010: 2–5), B. H. Smith explains how, in the early 1950s, Marion Keech, resident of a town in the U.S. Midwest, called on newspapers to let them know of a coming flood. It was going to be the first in a series of catastrophic events, leading to eventual worldwide cataclysm. Keech had been told about these forthcoming occurrences by aliens through the medium of automated writing. Along with a small set of devotees, she prepared herself in the countryside of Minnesota. Now, shortly after having made her knowledge public, Keech got five additional followers. At least this was what they claimed to be. Who were these newcomers? Neither anthropologists, nor secret agents, they were a group of psychologists. Alerted to the existence of the millenarians through newspaper reports, they had decided to conduct a “field test”, a natural experiment to test their psychological theory. This theory had to do with the tendency of people to remain convinced of their prior beliefs in spite of disconfirming evidence. When the flood failed to materialize, the psychologists did indeed get their hands on a body of evidence that bore on the matter.

Conceived as a field test, the set-up I have just described was clearly etic. The purpose was to apply an outsider’s neutral perspective. It was to conduct a naturalistic study of an empirical phenomenon about which psychologists had so far only been able to obtain archival evidence. Although they went to live with the millenarians, the psychologists were not at all into understanding the meanings or social contexts. At the same time, however, the actual form of engagement can be characterized as a kind of covert ‘participant observation’. Thus, although the psychologists’ ambition was etic, their mode of operation defied the traditional requirements of detached objectivity. Indeed, they attempted to establish detachment by pretending to go native.

From the present vantage point, we are of course likely to view the procedure as ethically problematic. More importantly for our purposes, however, methodological difficulties also ensued, since the psychologists’ method was precisely *neither* outsider nor insider. Instead it thoroughly mixed up etic and emic “genres” of inquiry. And indeed this mixture created the specific opportunities and problems for their research into the psychological make-up—the humanity—of their subjects.

This methodological mixture was not due to any deep reflexive consideration. Indeed, it happened quite *in spite of* the etic-objectivist ambition of the psychologists. The contrast to contemporary STS and social anthropology is thus striking, since these fields have paid sustained and explicit attention to their respective processes of making knowledge. In STS, a particularly important methodological reorientation goes under the name of symmetry (Bloor 1976; Latour 1993). In its basic form symmetry means that the same form of



explanatory causes should be adopted to account for both what is viewed as rational and irrational behavior, the same type of general explanation, that is, for both millenarian “irrationality” and scientific “rationality”.

B. H. Smith’s comments on the case just described are symmetrical in this sense. She suggests that the millenarians’ behavior after the non-occurrence of the flood certainly did exemplify the psychologists’ thesis (on the persistence of belief in the face of disconfirmation). However, Smith notes in addition that several of the scientists’ predictions *failed* to come through: for example, several millenarians did abandon their convictions. Nevertheless, just as many millenarians were capable of offering creative accounts for why catastrophe had not occurred, the scientists, too “exhibited considerable resourcefulness in explaining the relevant disparities between expectations and experience” (Smith 2010: 4).

In fact, the theory tested by the psychologists later became famous under the name “cognitive dissonance”. Nevertheless, what Smith’s analysis shows is that it simultaneously *worked and did not quite work*, and this *both* in the case of the millenarians *and* in the case of the psychologists aiming through that very study to validate it.

Smith hands us the tools to deconstruct this theory: she indicates both methodological and reflexive problems. And yet, she suggests, dismissal would be an inadequate response. For deconstruction offers no assistance if we want to account for the fact that the theory of cognitive dissonance nevertheless “remains one of the most firmly established, highly respected, and intellectually fertile theories in the history of social psychology” (4). In an additional twist, it is a theory that Smith *herself* makes inspired (and reflexive) use of.

The latter point is important because it puts Smith’s symmetry in a particular light. Indeed, she uses the parable of the millenarians to make new points about precisely the phenomenon of cognitive dissonance. Which is to say that she is on *the psychologists’ side* as regards the *aim* of their study. From an anthropological point of view, however, we may add additional queries. Whereas Smith’s symmetry is used to argue that *at a certain level* (namely, the level of human cognition), the millenarians and the psychologists are *engaging in the same kinds of processes*, we might want to pause to consider in more detail the distinct and specific social practices and conceptualizations *of the millenarians*. Possibly this might include paying close attention to *their interpretations* of the scientific findings that they involuntarily helped to give birth to.

Adding to the inquiry, we would likely find that *at other levels* (than general human cognition) the differences between millenarians and psychologists were at least as consequential as their similarities. Quite possibly we would find that the kinds “humanity” and “sociality” that they engaged in and aspired to



exhibited quite radical differences. One significant benefit of adding *this* level of symmetry to the analysis would be that it ensured that “cognitive inventiveness” would not be the sole prerogative of the scientists. Inventiveness might also be an integral dimension of millenarian practice; it might reside, for example, in the material and social practices in which they engage. Explicating this possibility requires another analytical stance; one provided by empirical philosophy.

## Second Variation: Empirical Philosophy (against Perspectivalism)

Anthropologists interested in native knowledge, may ask the people they study what they think. And hope to hear interpretations of reality. But anthropologists may also try to investigate what people do. Ask them about, and observe, their activities. The latter method makes it possible for researchers to reconstruct the world not through a grid of attributed meanings, but through a series of interventions carried out—which allows them to talk about the realities that are performed (Mol 1998: 145).

The opening quotation provides a programmatic statement on how empirical philosophy differs from ethnography. Now, the description of ethnography as facing a choice between engaging interpretations or practical activities may strike anthropologists as peculiar. Ethnographers characteristically deal with both, simultaneously. Is there any reason for requiring a principled decision to prefer one or the other? In reality, of course, people *do act* and *do interpret*. If Mol’s characterization has an important programmatic function it is because it aims to specify an approach to the study of actions and relations that is not emic and human-centered and not, therefore, anthropological as classically conceived. This is what she calls empirical philosophy. More concerned with what people do than what they think, the approach appears etic in aspiration. Of course, the situation turns out more ambiguously in the end.

Now, in *The Body Multiple* empirical philosophy is specified as follows:

It is possible to refrain from understanding objects as the central points of focus of different people’s perspectives. It is possible to understand them instead as things manipulated in practice. If we do this—if instead of bracketing the practices in which objects are handled we foreground them—this has far-reaching effects. Reality multiplies (Mol 2002: 4–5).

Reality multiplies, what could this mean? Modern philosophy has focused resolutely on epistemological questions: that is, questions about how the world can be known. With the suggestion that, by focusing on the manipulation of objects and practices, *reality multiplies*, the focus moves to questions of ontology: what the *world* is and how it changes. The term ‘empirical philosophy’ plays on this change in register. Practically, it requires the combination of conceptual

interests from the philosophy of knowledge with “ethnographic interests in knowledge practices” (5) (and cf. Jensen & Gad 2008).

But what does it mean to claim to take an interest in how the world *is*, or *becomes*? Philosophy since Kant has repeatedly made the argument that this is precisely what cannot be queried: we cannot engage the world freed from our own concepts. Indeed, most anthropologists would agree. The standard story might go like this: people interpret the world in numerous ways, and anthropologists interpret their interpretations in yet more ways. Nevertheless the world *underlying* the interpretations is real. It is just that it is inaccessible, hard to come by. Except perhaps by natural scientists.

By accepting this division of labor—reality (hard to come by) for the natural scientists, and meanings (overflowing from everywhere) for the social scientist—qualitative sociologists and anthropologists have participated in what A. N. Whitehead (1929) called the “bifurcation of nature”. Consider the case of medical sociology, a field with which Mol is in discussion. In a first move, this field defined a *social realm* of illness as opposed to a *medical realm* of the disease. As interpretive approaches gained in strength, disease itself came to be seen as a simply a perspective held certain powerful social actors, such as doctors. But, Mol suggests, covered over by increasing numbers of possible perspectives, *the world and its bodies disappeared*. This is why, as a following science, anthropology should *not* take as its aim the emic elucidation of yet more perspectives, meanings and interpretations. They are rather *part of a problem*:

For by entering the realm of meaning, the body’s physical reality is still left out [...] But the problem has grown: this time the body isn’t only unmarked in the social sciences, but in the entire world they evoke [...] In a world of meaning, nobody is in touch with the reality of diseases, everybody ‘merely’ interpret them [...] The disease *recedes* behind the interpretations (Mol 2002: 11–12).

In “perspectival tales”, Mol says, the body “stays untouched”: indeed, “this is built into the very metaphor of ‘perspectives’ itself” (12). In contrast, empirical philosophy is given the task of getting the world into view again. It does so by attending in painstaking detail to the ways in which objects, of disease, for example, are in practice dealt with, in different ways. Reality thus multiplies: a disease such as atherosclerosis is not singular but multiple and this is because it is *enacted and performed* differently in different care practices. It is manipulated in different ways: it is made to do different things. Atherosclerosis, for example, exhibits the multiplicity of reality: it may be all of: “claudication, thickening of the intima, loss of lumen, pressure drop, plaque formation” (Mol 1998: 161)—in

different times and places. Each of these distinguishing traits involves different materials, practices, and people who perform, manipulate, and alter reality.

Consequently, the different versions of the disease are precisely *not perspectives*, but they are not *naturalized* in the body of the patient either. Rather they are a “function of a wide range of habits and materials. Forms, knives, pain, hands, gloves, telephones, slides, what have you. Links of many natures. Heterogeneous links” (Mol 1998: 148). If eliciting the multiplicity of reality is a defining feature of empirical philosophy, it has to do with the specification and articulation of these links, since reality is literally performed through them. They are not perspectives, because it is not a matter of looking deeper or elsewhere in order to find others: there is no deeper reality lying under specific performances. Ontology is thus practically enacted: they can therefore be followed in practice (Jensen 2004). And empirical philosophy as a following science is one that follows the links that make up reality—and thus enact very different ways of doing sociality and humanity.

At this point, the characterization of empirical philosophy as *etic* is rendered ambiguous. Since the approach eschews any prior categorization of what can qualify as a relation, the “social” or “human” may inhere in scalpels and blood vessels; but “natural” relations may likewise be performed in conversations between doctors and patients. Indeed, the heterogeneous links that make up practice thus *include interpretations*, at least those offered to the empirical philosopher as articulations of what the relevant activities consist of. This is one reason why we can talk of the approach as symmetrical.

However, even if the *emic-etic* distinction is ambiguous, it still helps make vivid where the symmetry of empirical philosophy wavers. For although relevant links must be traced and delineated, a preliminary decision has been made to center focus on “what people do” (including what they say about what they do), rather than “what they think” in more generic terms. And even though this decision is related to the programmatic reorientation from epistemology to ontology, it does introduce an asymmetry. For what if people insist that their thinking is as important as their manipulations. Or, what if they are co-constitutive? As in the previously encountered criticism of the naturalistic tradition in STS, the question arises whether empirical philosophy becomes unnecessarily delimited if it takes the decision to withhold interest from “thinking” at face value.

Indeed, it could be argued that by focusing much more attentively on actors’ conceptualizations, more might be learned as well about the multiplicity of ontologies. After all, it would be a shame to bifurcate nature *in reverse* by making part of the world everything *except* how we conceive of it.

### Third Variation: Multinaturalism as Perspectivism

The Amerindian-derived conceit of “perspectival multinaturalism” emerged precisely as a result of an attempt to compare comparisons—that is, to contrast anthropological and indigenous modes of perceiving analogies between domains—and to trace a line of flight past the poles of the infernal dichotomies that form the bars of our metaphysical cage: unity and multiplicity, universalism and relativism, representation and reality, nature and culture, to name but a few (Viveiros de Castro 2011).

I have suggested that empirical philosophy—at least in its programmatic formulations—come across as *etic* but, nevertheless, incorporates the *emic* (even if somewhat half-heartedly). Yet, while empirical philosophy has aimed to find a way out of ‘perspectivalism’ by attending to practices, some anthropologists, prominently M. Strathern and R. Wagner, defined another analytical ambition: one whose purpose was to move anthropology *away* from a too literal concern with practices, towards an interest in dealing *more seriously* with indigenous conceptualization. E. Viveiros de Castro (1998) and T. S. Lima’s (1999) notion of multinaturalism is one result of this effort; their delineation of Amerindian perspectivism is another.

Even as both empirical philosophy and multinatural anthropology entail the undoing of central Western epistemological dualisms, such as mind–body, representation–reality, theory–practice, they come to this task via different routes. While empirical philosophy aims to tune in to the ways in which realities are performed in practice, and therefore engages “indigenous conceptualizations” primarily as verbalizations of concrete practices, multinatural anthropology takes as its starting point the “ontological presuppositions” that inform the ways in which indigenous people act. The reason that Amerindians act differently from the Danes, Dutch, Japanese, or Vietnamese has to do both with their tools and practices and also with their vastly different concepts of bodies (human, animal, technological or spiritual), and also of their equally different ideas of what we tend to call “the cultural”, “the social”, “the political”, and so on (Viveiros de Castro 2009: 247).

Indeed, as suggested in Viveiros de Castro’s opening citation, these differences extend to the question of whether any such categories have any purchase at all, and thus to the issue of comparison as such, as a variably configured form. This is why Viveiros de Castro identifies the interest in “comparing comparisons” as central. Comparison, of course, is also central to empirical philosophy. In the previously invoked example, Mol used comparison to evoke how different versions of disease were brought into reality, aligned, opposed or contrasted through a variety of practical regimes. Obviously, therefore,

the point is not to establish a clear-cut opposition between empirical philosophy and multinaturalism. Just as obviously, however, they are not the same.

Viveiros de Castro is fond of quoting R. Wagner's statement that in his engagement with the Daribi, "their misunderstanding of me was not the same as my misunderstanding of them" (Wagner 1975: 20). The notion of "comparing comparisons" pinpoints that this mutual incomprehension and can be taken as a privileged starting point for anthropological analysis, rather than as a problem, which has its solution in an analysis that resolves the misunderstanding.

To get a sense of the difference in play we turn to an example given by Viveiros de Castro (2009). In the example, a Piro woman responds to a mission schoolteacher who tried to convince her to boil water before giving it to her young child. The woman refused on the grounds that boiled water gave her child diarrhea. The teacher argued that in fact diarrhea was a result of *not* boiling the water. The clinching argument of the woman was "perhaps for people from Lima this is true. But for us native people from here, boiled water gives us diarrhea. Our bodies are different from your bodies" (Viveiros de Castro 2009: 243–4).

Multinaturalism is evinced in this example by taking the woman's explanation seriously: it is not culture that is different, or knowledge of the properties of water and children; it is nature that is different, the *bodies* of water and children. Viveiros de Castro connects this example with Evans-Pritchard's description of a Zande man who noted matter-of-factly that: "perhaps in their country people are not murdered by witches, but here they are" (1937: 540). For the anthropologist boiled water cannot give diarrhea, witches cannot murder. For Piro and Azande, they can (and do). In Denmark, ghosts of dead soldiers cannot roam the countryside, in Vietnam they do (Kwon 2008).

No account of the heterogeneous material practices through which water is boiled will allow the empirical philosopher to elucidate the ontological basis for these assertions. They are strictly embedded in the "perspectives" of the people that speak them. It is precisely the elucidation of the internal relations and coherences of such assertions that make up the project of multinaturalism:

[G]iven that witches [for example] 'cannot' exist (as we conceive the notions of possibility and existence), how can the anthropologist take seriously the conceptions of the Azande concerning the existence of witches? How can the anthropologist *reconceive*—in other words, reconceptualize—witches so that they can assume a possible mode of existence—in other words, an *interest* for us? (Viveiros de Castro 2011)

It may be said that we are then brought right back to the emic issue of insider perspectives, which empirical philosophy took us away from. Yet perspective is a somewhat imprecise term with which to characterize the views of the Piro woman

and Zande man. For as the former made clear, the issue is not one of cognitive beliefs and viewpoints but one of bodily differences. And thus we are brought back to the issue of comparing comparisons, for we cannot assume the norms of Western humanity and sociality in these cases. Directed back at people studying in the “generic West”, this raises the question of whether we can assume these entities, even “at home” (cf. Jensen 2011).

This question is something about which Viveiros de Castro has had little to say, although one of his main intellectual discussion partners, M. Strathern, has. Her way of going about can be roughly characterized as bringing concepts originally developed *in response to* Melanesian ethnography to bear on the “indigenous West”. This allows for a further comparison: how does empirical philosophy (at home but increasingly moving elsewhere) contrast with multinatural anthropology brought “back home”?

#### **Fourth Variation: Comparing Scales and Actors**

From the preceding sections it may sound as if empirical philosophy and anthropological multinaturalism have developed in parallel, with little mutual recognition or knowledge of shared interest. Of course, this is not quite so. The original formulations did indeed emerge separately, in response to specific concerns and intellectual trajectories in fields such as science and technology studies, the philosophy of technology, medical sociology, and anthropology, especially some of its Amerindian and Melanesian variants.

On the one hand, empirical philosophy and ANT were in conversation from early on with anthropological conceptions of agency and material culture. Later and more formative connections came about as a result of engagement with the also emerging sub-fields of anthropology of science, and were inspired in particular by M. Strathern and her colleagues’ work on the relations between new reproductive technologies and kinship, and on audit and evaluation cultures. On the other hand, anthropologists such as Strathern and Viveiros de Castro were also instrumental in bringing ANT inspired concepts and approaches to bear on ethnographic concerns that seemed to fall outside the scope of science and technology. There is thus increasing traffic between these “areas”, and analytical mixtures continue to proliferate. Indeed, concepts and modes of analysis currently move in multiple directions.

There are good reasons for this, since the STS and anthropological approaches I have discussed indeed share affinities and inclinations. Indeed, it is precisely because of these obvious affinities that I engage in the present endeavor to *differentiate*. I continue by pointing to a set of contrasts relating, first, to the



*scales of analysis* adopted by empirical philosophy and multinatural anthropology, and, second, to the role of nonhuman (or un-, or in-human) actors.

The starting point of ANT, as well as of empirical philosophy, is that the analyst does not know what the scale of a phenomenon is. It is traced in practice; thus the ontological contours of practice and technology are delineated, as in Mol's (2002) studies of Dutch atherosclerosis, Law's studies of English aircraft (2002), Latour's studies of French trains (1996). What a human is in relation to these practices varies, as do the forms of sociality they embody. This starting point has obvious affinities with multinatural anthropology, which also abstains from inflicting, on Amerindian or Melanesian people, standard Western conceptions of what they are and do. What are the contrasts, then? Most centrally, I think, the question of what goes into an analytical object varies. For what is common to the nonhumanist literature dealing in empirical philosophy is that the scale of analysis is a more-or-less delineated *practice*. This is not the case for multinatural anthropology. To be sure, Melanesians engage in practices, but the primary emphasis is not on their material enactment of those practices. It is rather on the patterned ways of knowing and living of these people.

The difference is clear when one considers modes of description. Viveiros de Castro, for example, moves from shamanic rituals to hunting practices, family relations and myths in a way that confounds the expectations of the STS-trained ethnographer. Likewise, Strathern's broad-ranging characterization of English kinship may startle, because of its apparently unqualified analytical jumps from one practice to another. The jumps are of course not random (and therefore not jumps either). The startling effect is a consequence of quite different shifts in scale than those that are the *métier* of the empirical philosopher. And the reason is that the assumed scale of analysis is precisely not practice. But if it is not practice, neither is it society nor culture. Rather, it is the ontologies of indigenous people. But ontology, again, operates differently here than in empirical philosophy. If, in empirical philosophy, the thoughts and knowledges of studied people are, in a sense, secondary or derivative of materially enacted practical ontologies, this claim is absurd for the multinatural anthropologist. For him or her, ontologies are rather the patterned sets of concepts held by these people, and these can be traced across a very broad set of cultural arenas as exemplified by M. Strathern's study of English kinship (1992).

As embodied concepts, the elucidation of indigenous ontology always requires description of how people act with nonhuman others. But how to get at such nonhuman others? Again, the immediate similarities between empirical philosophy and multinatural anthropology are striking. For Mol, Latour (and many others, including myself), the concern has been resolutely *etic* in the sense



that we have carefully followed and described *all the people and things that make a practice work*. For example, Mol talks of scalpels, walking sticks, beds, operating theatres. It is of little concern whether a doctor or nurse, if asked for verbal clarification, ascribes agency to an operating theatre what is central is to depict how materiality shapes ontology in practice. Now, Viveiros de Castro's actors likewise include nonhuman actors such as tapirs, jaguars, and the dead. In neither case is the human capable of acting alone—if we are not in a posthuman universe, we are at least in an amodern, or nonhumanist one. However, the etic and the emic are once again juxtaposed and blended differently in the 'symmetric' solutions adopted by these approaches.

Jaguars, for example, are prominent actors in Viveiros de Castro's outline of Amerindian ontology. According to Amerindians, jaguars, as other entities, see themselves as humans. They know this, among other reasons, because shamans can turn themselves into jaguars under certain conditions. Jaguars see themselves as humans, but because they are jaguars (and have different bodies) they see different things. Consequently, what humans see as blood, jaguars see as manioc beer. This is a basic figure in Amerindian ontology as outlined by Viveiros de Castro and T. S. Lima. But it is one foreign to empirical philosophy, since it is interested in materialized engagements between jaguars and people only to a limited extent (and how to trace the material enactment of nocturnal transformations of a shaman into a jaguar?).

The contrast can be articulated as a mutual criticism. On the one hand, the empirical philosopher might be tempted to argue that the way of parsing ontology preferred by the multinatural anthropologist reintroduces precisely the emic and *human-centered bias* that empirical philosophy has struggled to get rid of. For, although there are plenty of nonhuman actors, they are all seen through indigenous human classification systems. Where, then, is the jaguar acting *in its own right*? But then, the multinatural anthropologist might reply, who are we to tell how the jaguar acts as jaguar? Is a jaguar bound to behave as Westerners think of them, inspired by viewing too much *Animal Planet*? Is this not the very point at which the basic assumptions of Euro-American ontology reappear in ANT and empirical philosophy? Perhaps it is impossible to deal with the question of what is a practice (and what is social), and what is an actor (and human), without taking into considerations the ontological presuppositions one brings to bear on analysis. Perhaps, as well, this is something that becomes increasingly apparent to the STS researcher when he or she moves further away to places increasingly and unlikely to share basic ontological commitments (cf. Verran 1998).

### **Fifth Variation: Perspectives and Perspectivism**

These differences between empirical philosophy and multinatural anthropology are exhibited, their differences and stakes interestingly magnified in a recent discussion between A. Mol and M. Strathern, which also foregrounds the broader issue of humanity and sociality.

As we have seen, Mol and her colleagues in STS have been developing analyses of ontological multiplicity. To be sure this has entailed criticism of the emic anthropological tendency to focus on and, indeed, advocate multiple points of view. Yet Mol's main adversaries were never anthropologists. In the first instance, empirical philosophy was an effort to get around the dichotomous alternative of scientific naturalism and social constructivism. The perspectives that trouble Mol are the innumerable theoretical perspectives that can be taken on any phenomena. Her solution was to pay much closer attention to materiality and how it is dealt with in practice.

Now, in the paper "Binary License", Strathern (2011) addresses the issue of how a "comparative relativism" (Jensen 2011) inflects anthropological analytical practice, and makes reference precisely to the distinction between Amerindian perspectivism (à la Viveiros de Castro) and Western perspectivalism (as criticized by Mol). Strathern suggests, however, that studies focusing on ontological multiplicity do not break radically with perspectivalism, but operate from within the same overall perspectival horizon. "Multiplicity" she argues, is simply "perspectivalism's critique of itself" (Strathern 2011).

Whereas STS analysts would be inclined to see Strathernian perspectivism and Mol's multiplicity as sharing an analytical motive—in contrast with Western perspectivalism, Strathern offers a quite different classification. Indeed, she suggests that "it goes without saying that perspectivalism and its critique is the antonym of perspectivism". It offers, as she puts it, a "different mathematics altogether". The etic–emic is blended differently; once again, we are in the realm of mutually different (mis-)understandings.

In response to Strathern's paper, Mol picks up precisely on Strathern's classification, of both multiplicity *and* perspectivalism, as antonyms of perspectivism. She comments on the implied binary: "Here one world, many viewpoints, there one viewpoint, many worlds. Multiculturalism versus multinaturalism: the binary is stunningly clarifying and movingly beautiful" (Mol 2011). But, Mol asks, where to go with that observation of categorical difference? Mol continues by questioning Strathern's strategy of stressing difference (between empirical philosophy and multinatural anthropology but also, by implication, between the people and things addressed via them). For Mol, the question that must be addressed is one of learning:

Is being different all we can do? There is so much to learn. For instance, if the Hagen have no nature and no culture, then why, just because I have been born in the Netherlands, should I? (Mol 2011)

The issue of politics surfaces here as well because Mol uses this rhetorical question to query whom we hope will be capable of drawing insight or actions from these analyses. Is the primary aim to elucidate Hageners' (local, social) ontological configurations? Or, is it to provide tools for thinking about other human and social configurations, elsewhere? Indeed, is this choice exclusive? Mol's stance is that it is not, proposing that analyses should facilitate learning from "site and situations elsewhere, not just *about elsewhere*, but also *for 'us'*".

In making this argument, Mol considers Strathern's analysis to be overly preoccupied with questions relating to knowledge (how we, *from here*, can get understand people *elsewhere*). These are, of course, classical emic concerns of anthropology. But rather than remaining at the level of comparing and contrasting "conceptual configurations" only in order to find how knowledge differs, Mol reiterates the argument that we may stick closer to the level of materiality—comparing, for example "not conceptual schemes but practices of cutting" into the bodies of patients.

Thus, transporting the analytical focus back to terrain of practical ontology we may observe how, *in theory*, different worldviews (à la Strathern and Viveiros de Castro) may be in play but, *in practice*, different knowledge can co-exist, even where there is no shared conceptual grounding.

Mol ends her response with two questions. Having learned from Strathern's Melanesian work how to be *differently interested* in "the hospital around the corner", she wonders whether, given Strathern's argument's ontological alterity, this analytical transportation is a "permissible move". "Is it ok", Mol asks, "once we have been taught how to recognize them, to 'find them diffracted' in other times and places (2011). A second urgent question follows. With the ambition to read ethnographies for how they might help change "who 'we' are, or, for that matter *what we do*", Mol brings us back to an Amazonian example. While Amazonians may "*conceptualize* all relations in metabolic terms", Mol notes: the rest of us, even if we talk knowledge and eyes, are, *in practice*, eaters, too". Most of us—Western and Japanese—relate to "most of the world as prey. By far the largest part of the global biomass is currently *grown* or *raised* for humans to feed on". Food and fighting interrelate, increasingly and globally. Humanity and sociality, both locally and globally, may be reconfigured through food. The activist end point of Mol's comment is to ask: "in which vocabulary to write about that". The issue relates to the practical consequences of conceptual work.

## Sixth Variation: Matters of Consequences

This raises the issue of whether specific questions of practical consequences (in plural) can be separated from questions of what, for lack of neutral word, we may call questions of conceptualization? To address this general question of analytical consequence (in the singular), I trace the exchange between Mol and Strathern to its end (asymmetrically, since Strathern had the last word!).

In response to Mol, Strathern qualifies the stark binary she initially offered between empirical philosophy and multinatural anthropology: “while a perspectivalist viewpoint cannot enact a perspectivist one, it can co-exist with the enactment of its critical opposite, ‘multiplicity’” (Strathern 2011a).<sup>2</sup> Strathern, however, continues to observe that the question of consequences is inseparable from issues of description and analysis. In the terminology used here: since the emic and the etic invariably blend, it requires ongoing vigilance to handle the mixture.

Thus Strathern suggests that Mol moves too quickly to separate the practices from the way in which they are described, without recognizing that this separation is of analytical consequence. What is taken for granted: “in the juxtaposition of acts and practices seems to be the sense in which *acts are not affected by how they are described*” (2011a, my emphasis). The issue is that what comes to be defined as the practical matter of consequence is bound up with the way in which the matter is described. This, in turn, relates to the specification of what counts as consequential analytical questions. Because blending the empirical and the conceptual, the inside and the outside, is *what occurs in* description, Strathern continues, Mol is also able to “hold the question of description at bay only for so long” (2011a).

How is that? It appears only too obvious that situations relating to global humanity, such as food shortages (to which Mol referred), or to local sociality, such as indigenous health conditions (which Viveiros de Castro touched upon), require urgent attention. Taking seriously Mol’s invitation to consider the material practices of cutting, however, Strathern invites comparison of a quite different order, by evoking a Melanesian scene:

Suppose cutting people off from one another were routinised, and to be a man you had to shed feminine parts of yourself and discard a woman’s world, you might be made to wash your eyes with abrasive leaves in a cold mountain stream (2011a).

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<sup>2</sup> It thus appears that Mol’s request for a permit to bring multinatural perspectivism thought to bear on “the hospital around the corner” is granted.

If this example seem to stretch the notion of cutting, extending it to incorporate (untenable) conceptualizations, Strathern argues, this is precisely “an effect of the English language”, in which

[O]ne appears to be speaking much more metaphorically in the case of persons cutting themselves off from one another, itself a perfectly acceptable figure of speech in English, than in the case of the incisions that bloody a novice’s back (2011a).

From a multinatural vantage point, however, the relations are nowhere as clear. Western understandings of what counts as material practices of cutting fail to be relevant to the Melanesian concerns involved in this case. In which case, as Strathern concludes, “it is not at all clear to me what independent force the idea of action or practice now holds” (2011a).

We may compare this observation with Viveiros de Castro’s example of the Piro woman that insisted that boiled water gave her children diarrhea. Viveiros de Castro says about this example that the problem it poses is that most readers do not believe that Piro infants should be given unboiled water. We know that human beings are made of the same stuff, over and above, cultural differences. Most Westerners would argue that: “the Piro may deny this fact but their cultural ‘view’ cannot change one iota the way things are” (Viveiros de Castro 2009: 245).

One of the resonances of empirical philosophy and multinatural anthropology is that both (sets of) approaches are equally keen to move away from such hierarchical (culturalist) explanation and towards more symmetrical accounts. Following Mol or Latour, we may turn to practice. As previously noted, however, Viveiros de Castro’s approach is rather to turn to the “ontological presuppositions of the Piro mother’s reply” (246). But does this not confine multinatural analysis to a human-centered cultural analysis? Answering in the negative, Viveiros de Castro, argues that the anthropologist may take as his job to “determine the possible world expressed” in the Piro woman’s rejection of boiled water. He suggests that this does not require the analyst to “contrive an imaginary science-fictional universe endowed with another physics and another biology”. Instead, it entails delineating the problem “that makes possible the world implied” in the woman’s answer. This problem, he ventures, has

[N]othing to do with the quality of Santa Clara’s water supply, and everything to do with the relation, both bodily and political, between the mother, the schoolteacher, and the child (246).

It is not obvious that this viewpoint is very far from the “activist reading” advocated by Mol. Learning is clearly at issue. Still, as Strathern argues:

[W]hile there are many ways of learning, when the learning is caught up in apparatuses of description, then language and the position from which one speaks or writes cannot be innocent (Strathern 2011a).

Which is why Mol's central and unresolved question: "in what vocabulary to write about *that*?" (Mol 2011) is indeed a good one. It is one that each of the variations have struggled with; one that determines the ways in which the human and the social are made available in our descriptions.

### **Seventh Variation: Humanity and Sociality, Empirical and Conceptual**

In which vocabulary to write about *that*? (Mol 2011)

Taken out of its specific context, Mol's question can be made to stand for a generic problem: in which vocabulary to write about *that*—whatever is the *that* that anthropologists want to write about. Relocated in the context of the present occasion, the question can be specified as how to empirically and conceptually engage the variable parameters of the human and the social, as encountered by contemporary anthropologists.

Mol's question must continuously be asked and *dealt with* precisely because it is the kind of question that cannot receive any generally adequate answer. Because the *that* varies: as in Strathern's (2011) discussion of encounters in Mt. Hagen decades ago, turns into a general discussion about how to theorize ethnicity, which again turns into Mol's (2011) question about global food shortage. And because this variation is both empirically and built into descriptive-conceptual packages, outsides and insides mix. For example, Strathern's concern is not *primarily* and certainly not *only* to do with Hagener conflicts. It is simultaneously to do with the work done by the descriptive moves through which their activities are elicited *as conflicts* rather than as something quite different.

Following some of the most interesting scholars in contemporary STS and anthropology, this paper has engaged in an effort of continuous variation—or comparative relativism (Jensen 2011), by following how in empirical philosophy and multinatural anthropology manipulate descriptive and conceptual "parameters" are manipulated in attempts to get different kinds of purchase on the human and the social.

Differentiating the routes traced by these approaches, the different conceptual-empirical resources they bring to the task, has been central. In this light it is worth noting that the traps that symmetrical STS and multinatural anthropology struggle to avoid often seems similar. Deeply committed to a simultaneous effort of ethnographic exploration and conceptual articulation, the body of research I have dealt with is unusually attentive to the mixtures of emic and etic inquiry, the



creativity involved in establishing continuity between conceptual and empirical registers. Yet this attentiveness and creativity is regularly perceived as a weakness of these studies. This is the trap set by modern epistemology.

For example: if B. Latour advocates a symmetrical anthropology, he can be criticized for failing to realize that most people and societies operate non-symmetrical hierarchies and do not believe that things and people have the same kind of agency. Or, if E. Viveiros de Castro (2011) advocates multinatural anthropology with the aim to provide a “theory of people’s ontological auto-determination”, this can be challenged with reference to his Deleuzian inspiration.

In these and other cases the clinching argument is that the emic has somehow been superseded by the etic, the conceptual somehow contaminates the empirical. Conceptual contamination takes us away from what is real and disables us from engaging urgent questions. Yet, in my view, much of the excitement generated by these diverse and overlapping approaches arises from their ongoing effort to destabilize and *redo* these binaries. And here I should like to agree with A. Mol: there is so much to learn, not only from the heterogenous peoples, cases, and practices we study but also from the heterogenous tools, methods, and analytical emphases used for articulating humanity and sociality. Learning, in this sense, provides the impetus for engaging in the variations above. Indeed, the combination and mutual translation of insights from empirical philosophy and multinatural anthropology seems a most fruitful way forward for both STS and anthropological scholarship (Gad & Jensen 2010; Jensen & Gad 2008).

As Mol insists urgent questions about humanity and sociality must be addressed using all empirical and conceptual means. But this can only occur in a situation informed by *sufficient perplexity* with regard to what is urgent, why, and for whom (incidentally, thinking back to the first variation, this can be thought of as a way of seeking out and learning from, rather than avoiding cognitive dissonance). Indeed, the scholars whose work I have taken liberties with today provide *resources for heightening perplexity*. For, according to their varied diagnoses, we are living in a world which, rather than consisting of one nature, one humanity and many societies, is populated by multiple natures in which humans, animals, societies, and technologies operate differently and continue to undergo modification. And we don’t yet know how!

In explicating his argument about the ontological self-determination of people, Viveiros de Castro argues that the central question (to which the *that* that we write about must always relate) is “where do we come from and where are we going?” The question is central because in Viveiros de Castro’s none too positive estimation: “we have to start from where we are because here is *not* where we want to be”. This, too, is an activist question. The challenge of how to “move



elsewhere” may indeed be seen as urgent. Given Viveiros de Castro’s lack of advice on where to move—and indeed why—it certainly introduces perplexity. Yet, perhaps introducing perplexity is precisely *the kind of activism* suited for anthropology and STS. In a political and academic climate characterized by the propagation of so many common and un-perplexed notions about humans and their social relations, perhaps it can even be seen as a radical—uncommon and perplexed—activism.

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